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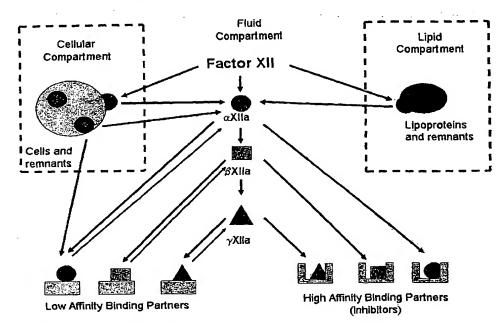
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(54) Title: DETECTION OR DETERMINATION OF VARIANTS OF FACTOR XIIA



(57) Abstract: Factor XIIa (activated Factor XII) exists in a variety of forms in the blood. Measurement of different forms provides information relevant for diagnosing, monitoring, or predicting the susceptibility to, progress of, or outcome of a disease or disorder, or of treatment of the disease or disorder in a subject having or suspected of having the disease or disorder.

WO 2004/057343 A3



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		PC	1/GB 03/05612
A. CLASSI IPC 7	FICATION OF SUBJECT MATTER G01N33/86 C12Q1/56 C07K16/	40	
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	ata base consulted during the international search (name of data be ternal, CHEM ABS Data, BIOSIS	ise and, where practical, searc	ch terms used)
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the re	levant passages	Relevant to claim No.
Y	WO 90/08835 A (COAGEN LIMITED) 9 August 1990 (1990-08-09) cited in the application the whole document	·	1-93
Y	EP 0 078 764 A (PENTAPHARM A.G.) 11 May 1983 (1983-05-11) the whole document		1-93
Y	EP 0 259 857 A (NIPPON ZOKI PHARI CO., LTD) 16 March 1988 (1988-03- the whole document	1-93	
Y	EP 0 637 633 A (NIPPON ZOKI PHARI CO., LTD.) 8 February 1995 (1995- the whole document		1-93
		-/- -	
		_	
	ner documents are listed in the continuation of box C.	X Patent lamity member	ers are listed in annex.
"A" docume conside "E" eartier diffing di "L" docume which i citation "O" docume other n "P" docume later th	nt which may throw doubts on priority claim(s) or is cried to establish the publication date of another to or other special reason (as specified) and the publication or nearly to an oral disclosure, use, exhibition or nearly the priority of the international filling date but an the priority date claimed.	or priority date and not in cited to understand the pinvention 'X' document of particular relicance to econsidered not involve an inventive step involve an inventive step cannot be considered to document is compiled to document is compiled to ments, such combination in the art.	evance; the claimed invention involve an inventive step when the ith one or more other such docu- ibeling obvious to a person skilled same patent family
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In ional Application No PCT/GB 03/05612

(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	PCT/GB 03/05612		
egory •		Relevant to claim No.		
	WO 89/11865 A (TEMPLE UNIVERSITY OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION) 14 December 1989 (1989-12-14) the whole document	1-93		
	DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; KRIZHEVSKAYA, YU. V. ET AL: "Chromatographic method for the determination of the Hageman factor (blood coagulation factor XII) in human blood serum" XP002253585 retrieved from STN Database accession no. 96:213764 abstract & VOPROSY MEDITSINSKOI KHIMII , 28(2), 128-32 CODEN: VMDKAM; ISSN: 0042-8809, 1982,	1-93		
	DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; 1990, ADANY R ET AL: "INCREASED DENSITY OF HISTIOCYTES IN UTERINE LEIOMYOMAS" XP002253586 Database accession no. PREV199089128543 abstract & INTERNATIONAL JOURNAL OF GYNECOLOGICAL PATHOLOGY, vol. 9, no. 2, 1990, pages 137-144, ISSN: 0277-1691	1-93		

INTERNATIONAL SEARCH REPORT

in ional Application No PCT/GB 03/05612

				1 101/08	PC1/GB U3/U5012	
Patent document clted in search report		Publication date		Patent family member(s)	Publication date	
WO 9008835	Α	09-08-1990	AT	121788 T	15-05-1995	
			AU	641912 B2	07-10-1993	
			AU	5030590 A	24-08-1990	
			CA	2045475 A1	28-07-1990	
			DE	69018968 D1	01-06-1995	
			DE	69018968 T2	24-08-1995	
			DK	455707 T3	26-06-1995	
			EP	0455707 A1	13-11-1991	
			ES	2072423 T3	16-07-1995	
			MO	9008835 A1	09-08-1990	
			IL JP	93207 A	27-02-1994	
				2916252 B2	05-07-1999	
			JP NZ	4503006 T	04-06-1992	
			US	232273 A	26-03-1992	
				5500349 A	19-03-1996	
EP 0078764	Α	11-05-1983	AT CA	17262 T	15-01-1986	
			DE	1184837 A1 3268329 D1	02-04-1985 13-02-1986	
			DK	484682 A ,B,	03-05-1983	
			EP	0078764 A1	11-05-1983	
			ËS	8400603 A1	16-01-1984	
			JP	1691827 C	27-08-1992	
			JP	3046119 B	15-07-1991	
			ĴΡ	58086100 A	23-05-1983	
			NO	823619 A	03-05-1983	
			US	4598043 A	01-07-1986	
EP 0259857	Α	16-03-1988	AT	100150 T	15-01-1994	
•			DE	3788762 D1	24-02-1994	
	•		DE	3788762 T2	23-06-1994	
			EΡ	0259857 A2	16-03-1988	
			ES	2061459 T3	16-12-1994	
			JP	1725747 C	19-01-1993	
			JР	4014000 B	11-03-1992	
			JP	63185398 A	30-07-1988	
			KR	9609766 B1	24-07-1996	
			US 	4985354 A	15-01-1991	
EP 0637633	Α	08-02-1995	JP	3213831 B2	02-10-2001	
			JP	7051097 A	28-02-1995	
			AT	203277 T	15-08-2001	
			CN	1110409 A ,B	18-10-1995	
			DE	69427723 D1	23-08-2001	
			DE	69427723 T2	08-05-2002	
			EP ES	0637633 A2	08-02-1995	
			KR	2159535 T3 270161 B1	16-10-2001	
			US	5599683 A	16-10-2000 04-02-1997	
		14 10 1000	110	4000000		
WO 8911865	Α	14-12-1989	US	4963657 A	16-10-1990	
WO 8911865	A	14-12-1989	ΑT	129902 T	15-11-1995	
 WO 8911865	A	14-12-1989	AT CA	129902 T 1315716 C	15-11-1995 06-04-1993	
 WO 8911865	Α	14-12-1989	AT CA DE	129902 T 1315716 C 68924773 D1	15-11-1995 06-04-1993 14-12-1995	
	A	14-12-1989	AT CA DE DE	129902 T 1315716 C 68924773 D1 68924773 T2	15-11-1995 06-04-1993 14-12-1995 15-05-1996	
	A	14-12-1989	AT CA DE	129902 T 1315716 C 68924773 D1	15-11-1995 06-04-1993 14-12-1995	

Form PCT/ISA/210 (patent family annex) (January 2004)